



ALLGEIER, MARTIN and ASSOCIATES, INC.  
Consulting Engineers

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JOPLIN, MO 64803

City Clerk's Office  
110 W. Maddux, Suite 205  
Branson, MO 65616

RFP 2493-25  
June 25, 2019 @ 3:00 P.M.

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ALLGEIER, MARTIN and ASSOCIATES, INC.  
Consulting Engineers

Engineering and Design Services  
City of Branson, MO





## Contents

Letter	
Experience .....	1
Project Approach/Understanding .....	7
Quality Assurance/Quality Control .....	9
Preliminary Project Schedule .....	10
Resumes .....	10
References	



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Consulting Engineers

June 25, 2019

City of Branson  
City Clerk's Office  
110 W. Maddux, Suite 205  
Branson, MO 65616

Re: Lift Station 17 Force Main Replacement and Spring Creek Neighborhood Water & Sewer Improvements

City of Branson Staff & Selection Committee,

We have thoroughly enjoyed the growing relationship with Branson and your initiative for community improvement. The public works and utilities serving your citizens and guests require continued expansion and maintenance as the City grows. This is no small task. The partnerships you need with engineering consultants to complete this task must be relationships built on trust, effective communication, successful performance and mutual interest. We believe moving forward with you to complete Lift Station 17 force main replacement and water and sewer upgrades in the Spring Creek neighborhood will further build the trust, effective communication and mutual interest we both seek.

This Statement of Qualifications demonstrates our extensive skill in engineering solutions for poorly performing force mains and extending water and sewer service with sufficient fire flows. It also demonstrates our knowledge of Branson utilities and the procedures you prefer when working with engineers. John Forrester's knowledge of the existing Fall Creek Booster Pumping Station (Lift Station 17), which connected a new 18" DIP force main to the existing 12" PVC force main is similar in scope. This project will tie into this same 18" DIP force main and replace the existing 12" PVC force main. The five projects we submit clearly validate our ability to manage this project effectively, keeping you on schedule and within your budget.

Our design team includes Chris Erisman, John Forrester, John Briggs, Dean Willis and Eric DeGruson. Chris is the Principal-In-Charge and will oversee the project deliverables. John Forrester is the Project Manager overseeing design work flow and is the primary point-of-contact for the City. Dean Willis is the Quality Control Engineer reviewing design features for consistency and constructibility. Eric DeGruson and John Briggs are Project Engineers producing design plans. All five resumes are provided.

The Design Completion on Schedule is addressed in the Project Understanding section. We describe our step-by-step process of design through construction. This includes our plan for client interaction, progress meetings and value engineering. The engineer's estimate, construction bid and final cost are included, where applicable, on our five project page descriptions. Our QA/QC procedures are described at the end of the Project Understanding section. Project references are included on each project page as well as additional references at the end of this document.

Thank you for the invitation to submit our qualifications for Lift Station 17 force main replacement and Spring Creek Neighborhood water and sewer utility improvements.

Sincerely,

**ALLGEIER, MARTIN and ASSOCIATES, INC.**

Chris Erisman, P.E.  
First Vice President  
chris.erisman@amce.com  
417.680.7200

John Forrester, P.E.  
Senior Civil Engineer  
john.forrester@amce.com  
417.351.6669



# Experience



Location	Staff	Similar Scope	Scheduling	Budget	Date
Rogersville, MO	Chris Erisman, P.E. John Forrester, P.E. John Briggs, P.E.	6,440 LF of 10" PVC Force Main 57 LF of 10" Ductile Iron Force Main 1,929 LF of 10" and 15' Gravity Sewer	Design and construction period was expedited to provide upgraded sewer service prior to opening of Skilled Nursing Facility	Estimate \$816,100.00 Bid \$749,647.51 Final \$751,934.95	2019
Nevada, MO	Chris Erisman, P.E. John Briggs, P.E. Garrett Wagner, P.E.	4,579 LF of 8" PVC Gravity Sewer Line 2,791 LF of 4"-6" PVC Sewer Lateral Line	Design and construction are ongoing utilizing a phased approach.	Estimate \$714,222 Bid \$722,273.93 Final N/A	2019
Nevada, MO	Chris Erisman, P.E. John Briggs, P.E.	12,700 LF of 8" water line replacement Ash Street 1,714 LF of 2", 5,937 LF of 6" and 3,538 LF of 12" water line replacement	Met owner's schedule expectations. Design & construction are ongoing utilizing a phased approach	Estimate \$2,400,000 Final year construction for bid approx. 2020	2015 - Present
Daviess County, MO	Eric DeGruson, P.E. Chris Erisman, P.E.	Drought Relief connection to Caldwell PWSD #2 (2019) 35,350 LF of 6" PVC Water Line 15,900 LF of 4" PVC Water Line	Met owner's schedule expectations	Estimate \$2,010,536 Project will bid for construction in 2019	2018-2019
Cassville, MO	Chris Erisman, P.E. John Briggs, P.E. Garrett Wagner, P.E.	30,000 LF CIPP 280 Lateral Connection Repairs 7,300 LF of 18" Sewer Line 2,600 LF of 12" Sewer Line	Monthly updates on project status prior to City Council meetings	Estimate \$3,100,000 Bid Construction to start Winter 2019	2019-2020





## Highway VV Sanitary Sewer Upgrade Rogersville, MO

### PROBLEM

Wastewater generated on the south side of Highway 60 was being pumped through three pumping stations utilizing an undersized common force main. During peak flow events when all 3 pumping stations were needed to operate, the undersized force main prevented the pumping stations from operating at design flows. Additionally, the existing pumping stations were at design capacity and could not accept additional tributary flow. In reality, these factors prevented any future development from occurring in the area until a major wastewater improvement project could be completed.

### SOLUTION

The City engaged Allgeier, Martin and Associates to evaluate the situation and determine the most cost-effective solution to provide expanded capacity of the wastewater collection and transportation system. The solution was to decommission one pump station by extending gravity sewer downstream to an upgraded pumping station along with installation of a new properly sized force main that transported the wastewater to the existing collection system north of Highway 60. Additionally, the 3rd pumping station was allowed to utilize the previously undersized common force main as now a dedicated force main. To accommodate future growth, the upgraded pumping station was sized to provide flow equalization of future peak flows.

### FEATURES

- Original three pumping station capacities were 80 gpm, 100 GPM and 200 GPM
- The 80 GPM pumps continued to flow to a 4-inch force main
- 200 GPM pumps were decommissioned and gravity fed to the 100 GPM station
- 100 GPM pumps were replaced with a 700 GPM variable frequency drive controlled pumps
- Peak flow projected to the upgraded pumping station is 938 GPM which will be flow equalized in the wet well and three inline storage wells
- Standby generator was provided
- 1,929 L.F. of 10" and 15" gravity sewer
- 6,497 L.F. of 10" force main
- Bid Price: \$749,647.51
- Final Price: \$751,934.95

### REFERENCE

Bryan Inmon, Public Works Director  
417-569-2777  
binmon@rogersvillemo.org





### Five Year Water Line Replacement Program Nevada, MO

#### **PROBLEM**

The City of Nevada has areas of aging pipe that are a continual source of maintenance and in need of replacement. Numerous lines within City streets and several near Missouri State Highways are a continual source of maintenance and ongoing repairs. These roadways run through residential and commercial areas of the City and require numerous service laterals coming from the main. In many instances, service lines for customers are laid across multiple properties. These service lines eventually attach to deteriorating and undersized mains that at times were installed in dead-end configurations.

#### **SOLUTION**

Allgeier, Martin was retained by the City to design replacement of the main lines serving these areas. The lines vary in size from 2" diameter to 6" diameter. New replacement lines will be installed to be more readily available to individual properties, be properly sized, include additional fire hydrants and eliminate dead-end runs wherever possible. Substantial planning efforts were necessary to allow for continued supply of water to existing customers in the area. Due to the large number of needed improvements, Allgeier Martin worked with City staff to develop a Five-Year approach to address the areas with the most deterioration and maintenance needs. An "Owner Supervised" plan was submitted to the Missouri Department of Natural Resources and approved so that the City could expedite the replacement of the mains over a Five-Year period without the need to obtain multiple permits.

#### **FEATURES**

- 12,700 LF 8" Diameter Water Line replacement project
- Projected Construction Amount: \$1.2 Million

#### **REFERENCE**

Randy Marti, Director of Administration  
417.448.2700  
marti@nevadamo.gov





### Miscellaneous Sanitary Sewer Collection Line Replacements

Nevada, MO

#### **PROBLEM**

The City of Nevada, MO has areas of aging pipe within its sanitary sewer collection system that is a continual source of maintenance and are in need of replacement. Additionally, many of these same areas of town have lines that are undersized, multiple residents tied to a single service line with numerous service lines crossing other private property with no record of their location or easement for access. Such occurrences result in extensive work to repair and try to locate when trying to repair.

#### **SOLUTION**

Allgeier, Martin was retained by the City to design replacement for these existing collection mains and service lines in and around Clay Street, Sycamore Street, Spring Street, Main Street and Alma Street. New mains were installed within these areas with the size of the new collection mains increased to reflect current loads. The new mains are to be located in areas to minimize and/or reduce service lateral runs as well coordinate with property lines such that a service line for a given property would not cross other multiple properties. New easements were obtained for the new mains to provide future access when needed. Other areas of town will be addressed as funding becomes available.

#### **FEATURES**

- Construction Cost: \$770,000
- Design and construction are ongoing utilizing a phased approach

### Additional Sanitary Sewer Work

A south interceptor sewer replacement and lift station improvements project includes the following features.

#### **FEATURES**

- 2,600 LF of 27" Diameter Sanitary sewer main
- 11,500 LF of 24" Diameter Sanitary sewer main
- 4,500 LF of 12" Diameter Sanitary sewer main
- Improvements to Existing Lift Station
- Original Contract amount \$1,996,880
- Final Contract amount \$2,137,275 (had extra money so additional work was completed-may just want to show this amount)

#### **REFERENCE**

Randy Marti, Director of Administration  
417.448.2700  
marti@nevadamo.gov





Public Water Supply District No. 2  
Daviess County, MO

**PROBLEM**

It is difficult to find a large volume source of quality water in the Daviess county area. Historically, rural citizens hauled and stored water at their homes for use and consumption. In the late 1980s, the people of Daviess County decided to move away from individual water supply and form a water district. Algeier Martin and County leaders, with the assistance of a legal advisor, were tasked with the development of a new rural water district.

**SOLUTION**

The Daviess County Public Water Supply District #2 (PWSD 2) was established in the early 1990s. Algeier Martin has provided planning and design services for this rural northwest Missouri water district since its inception. Those services included assistance with the establishment of the district, preliminary engineering reports and cost estimates, detailed plans and specifications, assistance in the bidding and awarding of construction contracts, and project representation during construction. The district covers approximately 345 square miles and serves nearly 900 customers. The system includes approximately 320 miles of 2" through 8" water mains, two booster pump stations, and three standpipes. All water is purchased from three surrounding public water supplies. The original construction project spanned several years and cost approximately \$5.5 million.

**FEATURES**

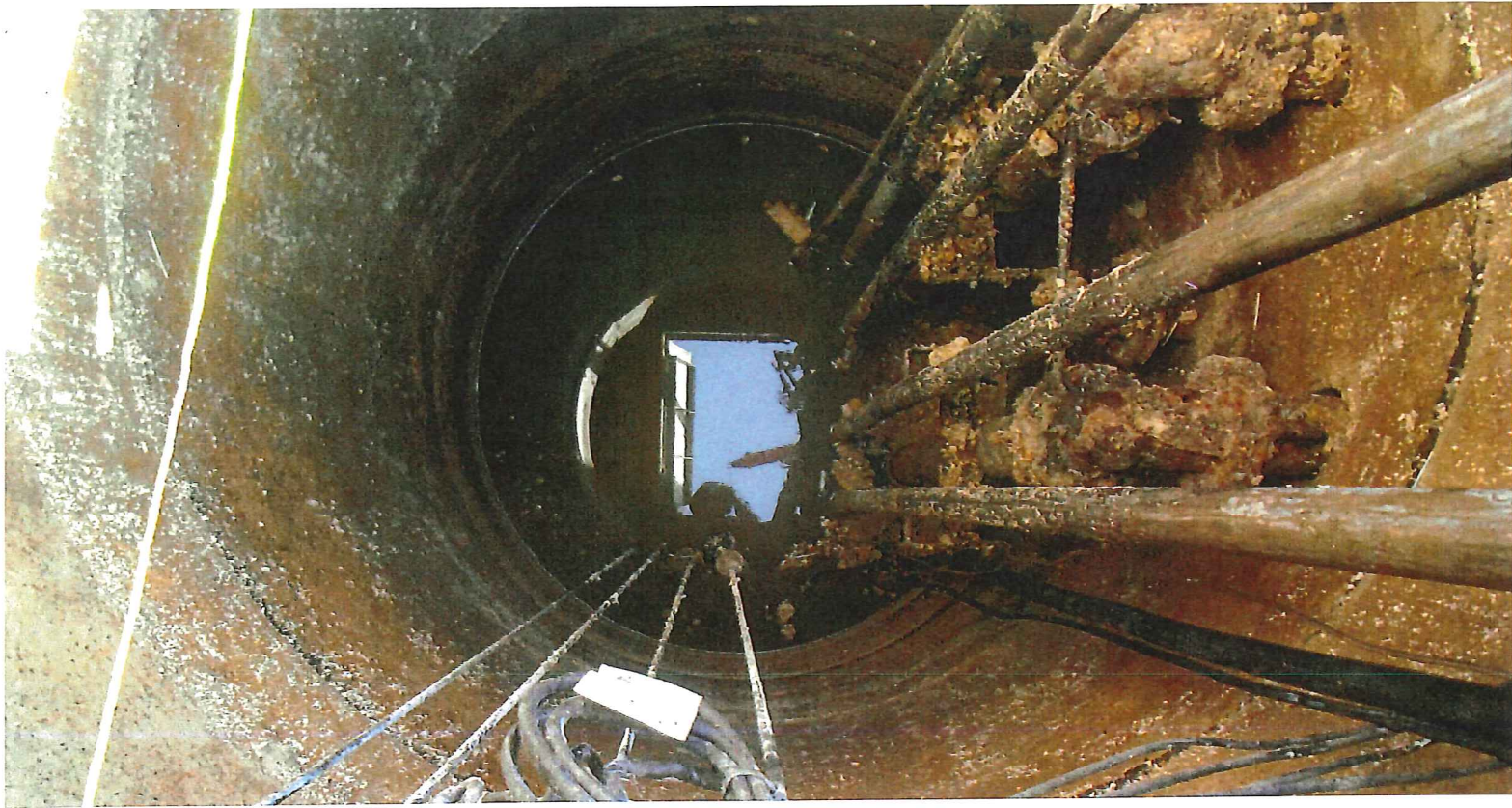
Projects completed since the development of the District (1995-2019)

- Numerous customer service evaluations and water line extensions
- Minor Engineering reports to address specific problems within the District
- Engineering reports for comprehensive planning (2011, 2014, 2017)
- Installation of the Midway Booster Pump Station (2005)
- Connection to the Livingston #4 water supply to convey water for the Daviess #2 District, the Cities of Breckenridge and Hamilton (2013)
- Includes a crossing of the Grand River with 8" water line (175 feet of clearance horizontally from both banks, and 15' vertically from the bottom of the channel - the bore is approximately 700' long with a vertical change of 40 feet)
- Complete Replacement of the City of Jameson Water System to be owned by the District (2015)
- SCADA for the entire system
- Drought Relief Grant project to provide an emergency connection from Daviess 2 to Caldwell PWSD #2 (2019)

**REFERENCE**

Wally Sperry, Field Superintendent  
660.663.3225  
sperry@windstream.net





## Wastewater Collection System Improvements Cassville, MO

### PROBLEM

For the past several years, the City of Cassville has experienced unusually high wet-weather flows at their wastewater treatment plant, leading to bypasses from their lagoon. Additionally, a large portion of the City's collection system located near the creek would surcharge during wet weather.

### SOLUTION

Allgeier Martin reviewed a previously prepared facility plan and made adjustments to better fit the City's current needs. Along with sanitary sewer CCTV footage provided by the City, Allgeier Martin requested additional CCTV inspections in targeted areas of the city. A combination of the review of these inspections and discussions with the City about known issues throughout the city provided Allgeier Martin the framework for the project. What was initially a purely sewer rehabilitation project turned into a project blending rehabilitation and replacement where more economically feasible.

This construction was funded by a USDA Rural Development.

### FEATURES

- 30,000 L.F. of Cured-In-Place Pipe (CIPP) Rehabilitation
- Rehabilitation of 130 manholes receiving a new frame and cover, cementitious liner, and chimney sealant
- Rehabilitation of 280 lateral connections receiving a trenchless Lateral Connection Repair (LCR) or open cut reconnection
- Open cut replacement of 7,300 L.F. of 18" diameter sanitary sewer, 2,600 L.F. of 12" diameter sanitary sewer, and 33 manholes

### REFERENCE

David Brock, Public Works Director  
4178474441  
dbrock@centurytel.net



# Project Approach/Understanding

Our project approach will follow the guidelines as described in the Scope of Services in the Request for Proposal # 2493-25. The Request for Proposal includes the preliminary design development, final design, bidding assistance and construction services. Additional details of our proposed project approach under the Scope of Services is described below.

## Phase One

Phase One will consist of a Preliminary Design Development study of the proposed Lift Station 17 Force Main Replacement and Spring Creek neighborhood water system and sanitary sewer system upgrade. Details of the study are as follows;

1. Acquire new LIDAR survey information from the City on focused project areas. Information will be reviewed and assessed with possible additional alignments of the force main, waterline and gravity sewer options. This data review will be for preparation of the Kick-Off meeting and initial site visit with the City.
2. Conduct a Kickoff workshop involving the Project TEAM. This TEAM will include City personnel such as City Engineer, Director of Utilities, Assistant City Engineer, Wastewater Collection and Water Distribution System Operators, along with Allgeier Martin's design staff. This kickoff workshop will be geared towards discussing the needs and goals of the force main, waterline and gravity sewer line replacements. Items to discuss concerning Lift Station 17 force main will include:
  - The operational parameter
  - Obtaining shop drawings and operational records
  - Conceptual location of connecting to the existing 18" ductile iron pipe (DIP) exiting Lift Station
  - Anticipated locations for air release/vacuum relief valve assemblies at high points along the force main,
  - Desired method of connecting to the existing DIP force main, and
  - Desired method of connecting of the new force main to the end of line manhole.

Items to discuss concerning the water and sewer replacement in Spring Creek neighborhood include:

- Review of conceptual alignments for both water and sewer
- Extent of service connection installation
- Pressure limitation guidelines for location of anticipated pressure reducing valve assembly
- Methods of connecting to existing manholes
- Limit of location of annexed areas currently not served by City water
- Verification of anticipated piping sizes and materials.

Through this process, possible options will be discussed and determined to be either a viable option for further study or eliminated. This process will also include the discussions of possible alignment obstacles. We rely heavily on local Staff knowledge of utility operations in establishing the viability of options to be further studied. From the workshop, we anticipate agreeing on project parameters for the improvements such as verifying the proposed force main, waterline and gravity sewer piping sizes, material type, possible inclusion of AWWA C905 PVC pipe closer to the end of the force main (where pressures are small), alignment obstacles associated with property ownerships and project budget. At this meeting, we will establish a frequency timetable for Project Progress Meetings with City Staff and Allgeier Martin project staff. Allgeier Martin will provide a thorough and detailed summary of discussions/directions/decisions from the Progress Meetings similar to those Project Meeting Summary reports provided on the Dewey Bald Area Water Improvements project.

3. Perform a Field Investigation (boots on the ground) for actual alignment and vertical considerations for the force main, waterline and gravity sewer alignments. We will compare the actual field findings with the City provided Lidar survey and explore possible elimination of air release/vacuum relief valve assemblies. We will perform a data gathering site visit to Lift Station 17. Findings from the Field Investigation will be coordinated with the City for agreement on proposed or alternate force main, waterline and gravity sewer alignments. This coordination will be critical in the need for obtaining specific easements from local property owners. Hand-levels will be used during this investigation to better refine possible alignments prior to field surveying operations.
4. Perform preliminary alignment evaluations to confirm/determine the most feasible route of the force main, waterline and gravity sewer. Cost considerations will be employed to assist with determining the most feasible route. Allgeier Martin will correspond with City Staff on possible alignments and be available to meet with specific property owners impacted by the piping installations.
5. Evaluate hydraulics of Lift Station 17 by developing a system curve of the existing force main with the existing pump curve overlaid to pinpoint an anticipated operating conditions (flow and head) of the pumping system. Flow data acquired from the field investigation site visit will be compared to the anticipated operating conditions of the pump. This information will assist in determining the operating condition of the pump impellers and wear rings, if any.
6. Evaluate hydraulics of proposed new force main with existing pumps by developing a new system curve of the new force main piping with the existing pump curve overlaid to pinpoint and anticipated operating conditions (flow and head) of the new pumping system. This information will determine the anticipated increase in pumping rate and verify the adequacy of the existing motors for the new operation point.
7. Prepare a preliminary cost projection for the force main, waterline and sewer line installation.
8. Prepare a Preliminary Design Development report that presents the findings, costs and recommendations from the study for the force main replacement for Lift Station 17 and the waterline and gravity sewer replacement for Spring Creek neighborhood. Report will be submitted to the City Staff for review followed by a presentation of the report to the City Staff. Comments obtained from the City during City's review and Allgeier Martin's presentation of the report will be discussed, evaluated and revisions incorporated into the final report.
9. Throughout Phase One, we will conduct regularly scheduled Progress Meetings between City Staff and Allgeier Martin's design staff. A thorough and detailed summary of the progress meeting will be developed by Allgeier Martin and provided to the City Staff. This method has proven to keep all affected TEAM members up-to-date on project progress and assists with obtaining critical information from City Staff on the existing utility system.



### Phase Two

Phase Two will consist of developing the necessary technical bidding documents including technical specifications and detailed construction drawings and assistance with project bidding. Major components of this phase include:

1. Perform necessary topographic surveys of the proposed force main, waterline and gravity sewer improvement alignments along with information on points of connection to the existing infrastructure. Survey will be tied into the City's survey datum.
2. Finalize hydraulic evaluations and calculations based on actual field survey data to verify concurrence with the preliminary hydraulic evaluations.
3. Develop plan and profile construction drawings of the proposed force main, waterline and gravity sewer replacements including all necessary details and technical specifications. The drawings will include plans for any necessary coordination with affected utility companies and any required utility relocations.
4. Develop necessary legal descriptions of temporary and permanent easements. As mentioned above, Allgeier Martin will be available to assist the City with acquisition of any easements, if necessary.
5. Perform internal Quality Assurance/Quality Control review of all aspects of the final construction documents and make necessary revisions prior to project bidding.
6. Develop a Scope of Work description for inclusion in the bidding documents and submit it along with necessary technical specifications, special provisions and construction drawing to the City for inclusion into the contract documents. We will provide the City a PDF file of the detailed construction drawings and a Microsoft Word document file of the technical specifications and special provisions for document assembly by the City.
7. Develop SWPPP and construction permit application and submit required information to MDNR.
8. Allgeier Martin will be available to answer questions from prospective bidders, will attend the bid opening, develop a bid tabulation, evaluate bids, review references of low bidder and make a recommendation of award to the City.
9. Throughout Phase Two, we will conduct regularly scheduled Progress Meetings between City Staff and Allgeier Martin's design staff. A thorough and detailed summary of the progress meeting will be developed by Allgeier Martin and provided to the City Staff.
10. Special Provisions of the contract will specify that all work to be performed to upgrade the City facilities shall not interrupt water or sewer service or prohibit continuous flow of water and wastewater through the City's systems except during scheduled tie-ins of newly installed equipment and piping.

### Phase Three

Phase Three will consist of construction support services by answering questions and lend technical support throughout the project duration. Major components of this phase include:

1. Attend Pre-Construction Conference with City Staff and selected Contractor.
2. Perform periodic site construction observations at strategic times during construction including attendance to progress meetings with the contractor, as requested.
3. Review of material and equipment shop drawings.
4. Be available to answer questions from City Staff and Contractor during performance of construction.
5. Perform a site visit should unanticipated problems arise and lend technical support throughout the construction.
6. Perform a final site inspection to determine conformance of as-built conditions to design intent.
7. Following completion of construction, Allgeier Martin will provide the City with as-constructed drawings in paper, DWG and PDF format. As-constructed drawings will be based on the original design drawings along with any revisions incorporated in construction by the contractor, approved by the City Inspectors and made known to Allgeier Martin.

### Value Engineering

There are three key areas of this project we perceive to benefit from value engineering procedures.

1. C905 PVC can be used at appropriate lower pressure areas. We will determine at what level or pressure point it is most cost feasible to switch from more costly DIP to PVC.
2. We will consider terrain, excavation costs, property ownership and functionality in determining route alternatives. Is there an alignment that minimizes or eliminates the use of air release/vacuum relief valves to save cost? Can the force main be placed in existing ROW or in the roadway bed to save cost? For alignment of gravity sewer, do we cross private lots as opposed to road ROW? What is the extra cost of the gravity sewer installed deeper to allow for service on the backside of lots?
3. We will brainstorm with local contractors who are most familiar with local conditions and resulting costs of construction methods. We will utilize local construction method knowledge to also help save costs.

In summary, value engineering procedures are a consistent part of our approach, as demonstrated in this narrative. We will assess and consider alternatives in materials, utility routes, ease of maintenance, project phasing and construction methods to ensure maximum cost effectiveness!



# Quality Assurance/Quality Control



We have established an excellent record of performance in cost control, quality work, and meeting schedules. It is our desire to provide engineering services that are beneficial for your continued growth and prosperity. It is essential that drawings, specifications, and cost estimates meet your expectations, and are thorough, clear, and complete. Allgeier Martin develops design and planning documents that meet goals and schedules with a high rate of success, and with lower project costs.

	Project Location	Bid Price	Final Price	Change
No. 2 Well & Tower	Branson West, MO	\$461,350.00	\$460,800.25	-0.1%
ECWAG #1 (Water Lines & Standpipe)	Daviess PWSD 2 (MO)	\$409,236.10	\$412,946.78	+0.9%
South Standpipes	Daviess PWSD 2 (MO)	\$193,450.00	\$192,792.00	-0.3%
South Distribution System Water Lines-Sec 1	Daviess PWSD 2 (MO)	\$1,089,055.70	\$1,101,403.94	+1.1%
South Distribution System Water Lines-Sec 2	Daviess PWSD 2 (MO)	\$2,134,538.30	\$2,187,756.18	+2.5%
North Distribution System Water Lines	Daviess PWSD 2 (MO)	\$1,412,869.10	\$1,453,463.99	+2.9%
Water Lines, Standpipes & Booster Pump Station	Caldwell PWSD 3 (MO)	\$2,998,809.50	\$3,130,427.45	+4.3%
Water Supply Well, Treatment Facilities, & Water Tower	Vernon PWSD 2 (MO)	\$648,938.00	\$650,751.00	+0.3%
Water System Improvements	Purdy, MO	\$542,796.00	\$540,456.40	-0.01%
Water Supply Well, Treatment, Distribution Improvements	Seneca, MO	\$528,872.69	\$555,755.78	+5.1%
Elevated Storage Facility	Lebanon, MO	\$705,000.00	\$705,000.00	0.0%
Wastewater Collection System	Duquesne, MO	\$3,454,362.20	\$3,473,801.66	+0.6%
"C" Line Interceptor Sewer	Branson West, MO	\$154,409.00	\$152,909.00	-1.0%
Lower S. Aunt's Interceptor Sewer	Branson West, MO	\$315,527.75	\$313,777.75	-0.6%
WW Pumping & Force Main	Branson West, MO	\$308,185.20	\$311,380.27	+1.0%
Wastewater Lagoon Improvements	Stella, MO	\$328,886.60	\$336,750.06	+2.4%
Wastewater Lagoon Improvements	Wheaton, MO	\$575,922.00	\$558,874.63	-3.0%
Monett Water Treatment Plant	Monett, MO	\$11,300,000.00	\$11,315,000.00	+0.1%



## Preliminary Project Schedule

Project Management/Monthly Meetings – 412 Days

### Preliminary Design - 45 Days

- Acquire and Review LIDAR Survey
- Kick-off Meeting and Field Investigation
- Evaluate Preliminary Alignments & Value Engineering
- Evaluate Existing and Proposed Hydraulics & Value Engineering
- Develop Preliminary Cost Projection
- Develop Preliminary Design Report
- Submit Preliminary Design Report for City Review
- Presentation to the City

### Final Design - 113 Days

- Perform topo survey
- Finalize Design Hydraulic Calculations
- Develop Plan & Profile Drawings, Technical Specs, SWPP and Scope of Work
- Develop Easement Descriptions
- Perform Final QA/QC
- Submit Final Documents to MDNR for Construction Permit

### Bidding/Contract Award - 60 Days

- Bidding
- Bid Open/Award - Two BOA Meetings

### Construction - 194 Days

- Perform Construction Services

Provide As-Built Drawings to the City

## Resumes

# CHRIS ERISMAN, P.E.

First Vice President, Civil Engineer | [chris.erisman@amce.com](mailto:chris.erisman@amce.com)

### Professional Experience

Chris Erisman provides project management and engineering for Water, Wastewater and Site Development projects. He is a Vice President overseeing project management for projects involving these disciplines. The benefits of hiring Chris for your project include his experience with municipal and rural water and wastewater systems. More than just the planning and engineering of these utilities, Chris is a good communicator who understands the budget constraints and political sensitivities of public utilities. He is a liaison with federal, state and city regulatory agencies.

#### Water & Wastewater System Projects

##### Nevada, MO

Chris is the Principal-In-Charge and often the Project Manager for numerous water system projects in Nevada, MO. These include a 5-Year Waterline Replacement Program, Ash Street Waterline Replacement, Smelter Hill Waterline Replacement, Cotter College Waterline Replacement, Miscellaneous Sewer Line Replacements, South Interceptor Replacement and Lift Station Upgrades and Wastewater Collection Facilities Plan (North System).

#### Wastewater System Study & Improvements

##### Purdy, MO

\$1,817,893 Construction Value

Provided project oversight for design and delivery of engineering plans to transport the community's sewage by lift station and 8" pressure sewer approximately 7 miles to the City of Monett for treatment. This solution was a result of an engineering report to evaluate options to improvement Purdy's wastewater treatment facilities. Funding came from U.S. Department of Agriculture – Rural Development.

#### CDBG-Disaster Relief Sewer Collection Renovations

##### Joplin, MO

\$20,000,000 Construction Value

After the 2011 Joplin Tornado, the City was granted funds from CDBG-DR, to repair the sanitary sewer collection system that were damaged. Chris provided oversight for the design and delivery of engineering plans. This included installation of 28,000+ linear feet of 8"-21" diameter gravity sewer pipe, 90,000+ linear feet of cured-in-place pipe (CIPP), 495 manholes repaired or replaced, lateral line installations and repairs and pressure testing.



ALLGEIER, MARTIN and ASSOCIATES, INC.  
Consulting Engineers



# JOHN FORRESTER, P.E.

Civil Engineer | [john.forrester@amce.com](mailto:john.forrester@amce.com)

## Professional Experience

John Forrester specializes in consulting engineering for municipalities and water utilities. He designs water and wastewater systems and stormwater handling facilities. John has performed many projects over his 39-year career. The benefits of hiring John for your project include his ability to manage a project from the study phase, through planning, design and construction. This allows for efficiencies that save you time and money. This holistic approach ensures quality control throughout the project. John's approach includes advocacy for state and federal regulations and knowledge in multiple funding sources for municipal water and wastewater projects.

### Dewey Bald Area Water Improvements (2019)

#### Branson, MO

The City wished to extend water service to an area west of Highway 76 and Shepherd of the Hills Expressway intersection. John is providing project management for the delivery of engineering plans for approximately 7,500 linear feet of 12" & 16" water line, one booster pump station and a 750,000-gallon elevated storage tank. This project is currently being designed.

### Missouri Highway VV Sewer Upgrade (2018)

#### Rogersville, MO

John provided project management for the most cost-effective solution to provide expanded capacity of the wastewater collection and transportation system. The solution was to decommission one pump station by extending gravity sewer downstream to an upgraded pumping station along with installation of a new properly sized force main that transported the wastewater to the existing collection system north of Highway 60. Additionally, the third pumping station was allowed to utilize the previously undersized common force main as now a dedicated force main. To accommodate future growth, the upgraded pumping station was sized to provided flow equalization of future peak flows.

### Additional Projects

John has designed numerous projects with previous firms. These include Water Supply Wells, Water Studies, Booster Pump Stations and Water Storage Tanks. He has completed these projects for municipalities and Public Water Supply Districts throughout Southwest and Southcentral Missouri. He is the Engineer-of-Record for the design and construction of the current Lift Station 17.

# JOHN BRIGGS, P.E.

Civil Engineer | [john.briggs@amce.com](mailto:john.briggs@amce.com)

## Professional Experience

John Briggs performs feasibility studies, quantity and cost estimates, project specifications and construction plans and details. He performs these tasks for water and wastewater systems. This includes both treatment planning and design as well as the piping and pumping of both potable water and wastewater.

The benefits of hiring John for your project include his ability to manage a project from the study phase, through planning, design and construction. This allows for efficiencies that save you time and money. This holistic approach ensures quality control throughout the project. John's approach includes advocacy for state and federal regulations and knowledge in multiple funding sources for municipal water and wastewater projects.

### CDBG-DR Collection System Renovation & Replacements (2015-2018)

#### Joplin, MO

Engineering design and contract administration services for the replacement of approximately 32,000 feet of 8" through 21" gravity sewer lines manholes and the renovation of nearly 85,000 feet of 8" gravity sewer lines, manholes, and lateral connections. Total construction costs were nearly \$16.8 million.

### Wastewater Collection System Improvements (2016)

#### Nevada, MO

Engineering design and contract administration services for the replacement of nearly 19,000 feet of 10" through 27" diameter gravity sewer lines and manholes. The project design also included the replacement of a vacuum prime lift station with a duplex submersible lift station. Total construction costs were \$2,137,275.

### MO Highway VV Sewer Upgrades (2018)

#### Rogersville, MO

Engineering services were provided for the preparation of Preliminary Engineering Report (PER) to offer the City of Rogersville with a recommended course of action toward improvements to the wastewater collection system. The PER evaluated multiple options for upgrades to the wastewater collection system and found the most cost effective option to be the construction of a single larger lift station and force main with a larger interceptor sewer line that would eliminate three lift stations. Total construction costs were \$751,934.



# DEAN WILLIS, P.E.

Chairman of the Board, Civil Engineer | [dean.willis@amce.com](mailto:dean.willis@amce.com)

## Professional Experience

Dean Willis is Chairman of the Board for Allgeier, Martin and Associates, Inc. Dean directs the Civil Division and is the firm's Senior Wastewater Engineer. Dean specializes in the management of major sanitary engineering projects, water supply, treatment, storage and distribution systems. He is particularly skilled in the preparation of studies, cost estimates, facilities design and O&M manuals. He is a valuable liaison with federal and state regulatory agencies in the design of water and wastewater systems.

## Projects: Collection, Pumping & Conveyance

### 2018 Tin Cup Lift Station Renovation

Joplin, MO

\$1,369,000 Construction

Replacement of five exiting pumps, replace electrical transfer switches and installation of new screen and washer/compactor.

### 2016 Filmore Lift Station Renovation

Joplin, MO

Replacement of three existing pumps by higher capacity pumps and upgrade electrical (\$367,000)

## Facility Planning & Engineering Reports

Wastewater Facilities Plans

- Joplin, MO (2008)
- Monett, MO (2013)
- Carl Junction, MO (2012)
- Carthage, MO (2017)
- Drexel, MO (2016)

The need for facility plans is generally due to growth, resulting in a need for additional capacity and the establishment of more stringent effluent limits for communities.

## Treatment

- Joplin, MO: Shoal Creek WWTP (1988 – Present) & Turkey Creek WWTP (1982-Present)
- Springfield, MO: Southwest Wastewater Treatment Plan (2018)
- Carl Junction, MO: Wastewater Treatment Plant (2014)
- Monett, MO: Eisenhower Wastewater Treatment Plant (2016)
- Coffeyville, KS: Water Treatment Plant Improvements (2001)

# J. ERIC DEGRUSON, P.E.

Vice President, Civil Engineer | [eric.degruson@amce.com](mailto:eric.degruson@amce.com)

## Professional Experience

Eric DeGruson is a Project Engineer managing projects in water and wastewater systems, site development and Concentrated Animal Feeding Operations (CAFO) permitting. In particular, Eric completes computer model analysis for water systems, cost estimating, planning and design of water and wastewater treatment facilities, engineering for improvements to wastewater collection and water distribution systems. He has specialized knowledge of numerous regulatory agencies and funding programs.

## Engineering Reports & Facility Plans

- Aurora, MO: Engineering Report on Treatment Plant & I/I
- Bolivar, MO: Engineering Report on Treatment Plant
- Butler, MO: Facility Plan & I/I Planning
- Liberal, MO: Facility Plan & Collection System Evaluation/Mapping
- Lockwood, MO: Engineering Report for WWTP & Collection System Improvements
- Reeds Spring, MO: Facility Plan
- Rogersville, MO: Engineering Report for Phosphorus Removal

## On-Call Engineering

Eric provides engineering services for on-call contracts in Aurora, MO, Fort Scott, KS and Neosho, MO. These projects typically involve general water and sewer line extensions, treatment plant renovations and upgrades, lift station pumping facilities, water booster pump stations and general consultation for city infrastructure.

## Daviess County PWSD #2 - Multiple Projects

Gallatin, MO

Allgeier Martin continues to serve as the engineer for PWSD No. 2, having recently prepared a comprehensive plan addressing future expansion. We are also currently providing design and construction phase engineering services for a new connection to a neighboring water district, which will enable PWSD No. 2 to sell water to the cities of Breckenridge and Hamilton Missouri. This connection will include a 6" water line crossing the Grand River.

- Connection of Water Districts for Supplemental Supply and Addition of Booster Station
- USDA Rural Development funding



ALLGEIER, MARTIN and ASSOCIATES, INC.  
Consulting Engineers



# References



## Requested References

### City of Nevada, MO

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### City of Cassville, MO

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### Daviess County PWSD #2

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Field Superintendent  
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### City of Rogersville, MO

Bryan Inmon  
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417-569-2777  
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### City of Purdy, MO

Bo Prock  
Mayor  
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## Additional References

### City of Monett, MO

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### City of Joplin, MO

David Hertzberg, P.E.  
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### City of Coffeyville, KS

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### City of Carl Junction, MO

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### Carthage Water & Electric

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